

Algebra 2 – "Stories to Graphs"

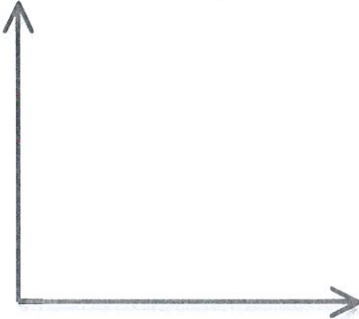
Name: _____

PART I.

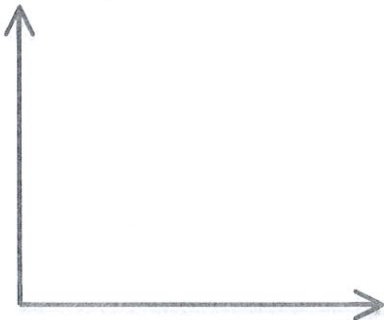
Do the following for each of these situations:

- Determine what labels to put on the x-axis and y-axis, and provide a brief explanation of why you chose those labels.
- Draw a graph to match the story.
- Explain the different features of your graph and how they actually connect to the story.

1. When I was walking towards the museum, I stopped for a few minutes to enjoy the warm sun. Then, I ran all the way to the museum.



2. When I got to the museum, I stood for a very long time in front of a Van Gogh painting because I loved it! Afterwards, I walked towards the food court because I was starving.

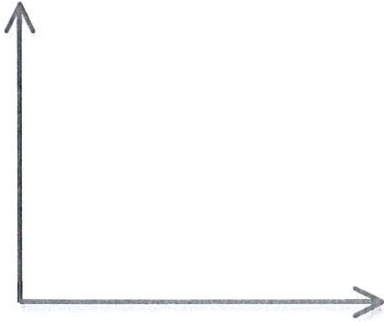


3. A car on North Capitol Street is blasting music and approaching you from a distance. As it nears you, the music gets louder and louder. After it passes, the music fades until the car is far in the distance.

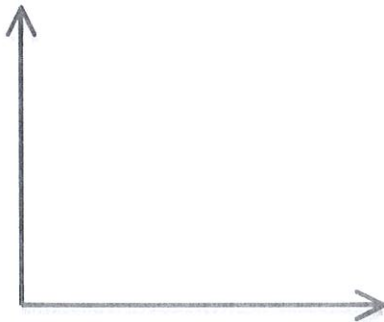


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4. Your car isn't too awesome, so one of your friends calls MTV and lands you a spot on *Pimp My Ride*. After the show's premiere, your car becomes very awesome, and everywhere you go, people want to see and ride in your car. As months go by, though, the car gets less and less popular.



5. Ms. Raskin decides to buy popcorn to make in her microwave at home. She pours some into the tub, sets the timer for 3 minutes, and listens carefully for it to stop popping. She hears a few pops over the first few seconds, then more and more, until around 1 minute and 30 seconds left, when the popping is so loud and frequent. At about 45 seconds left, the popping slowly begins to stop—and finally does with about 20 seconds left.

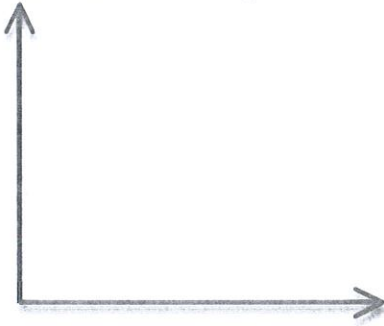


6. A person's blood sugar level at a particular time of the day is partially determined by the time of a meal. After a meal, your blood sugar level increases rapidly, and then slowly comes back down to a normal level. This varies during the day, of course, as you eat.



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7. When doing a jigsaw puzzle, I usually spend the first half hour or so just sorting out the pieces that might go on the edge of the puzzle. When I get together all of those pieces, I put them along the edge of the table. Then I start to fill in the puzzle with the center pieces. At first this takes a while, but the more pieces you put in, the less you have to sort through, and so the faster you get.



8. In the spring, my lawn grew very quickly, and it needed cutting every week. Ever since it got so hot and dry, it doesn't need as much cutting.

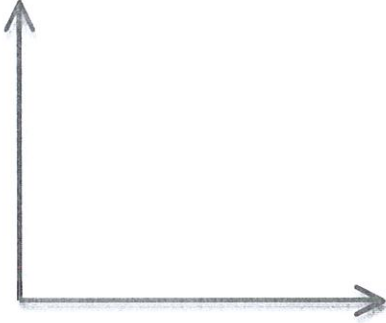


9. When I drive to the mall, I start off by driving for 10 minutes at about 30 miles per hour. I stop at a stoplight for 2 minutes, and then drive on at 20 miles per hour for about 5 minutes. I stop at another stoplight for 3 minutes. Then I get on the Beltway and drive at 60 miles per hour for about 30 minutes. I get off the Beltway and stop at a stop sign for a minute. Then, I drive into the parking lot.



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10. I bought a big box of Cheerios cereal to last me the entire week. On Monday and Tuesday, I eat the same amount of cereal. I noticed that as the week went on, I got hungrier, so I ended up eating more of it, until the weekend came, and I only ate a little bit. There was still some cereal left in the box when the next week arrived.



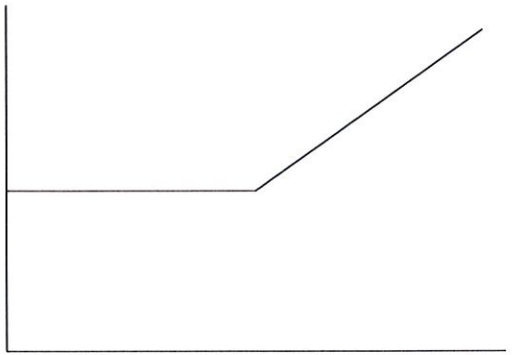
PART 2.

Do the following for each of these situations:

- Make up a story that could go along with the graph.
- Determine what labels you should put on the x-axis and y-axis, and provide a brief explanation of why you chose those labels.
- Explain how your story connects to the graph's features.

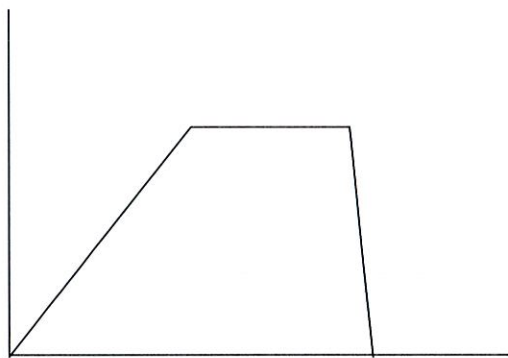
BE CREATIVE! Don't use stories we've already discussed in class, and don't make your stories remarkably similar as you move from graph to graph.

1.

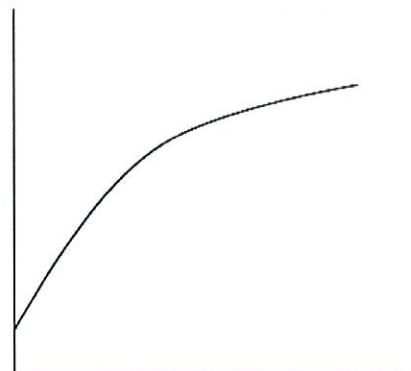


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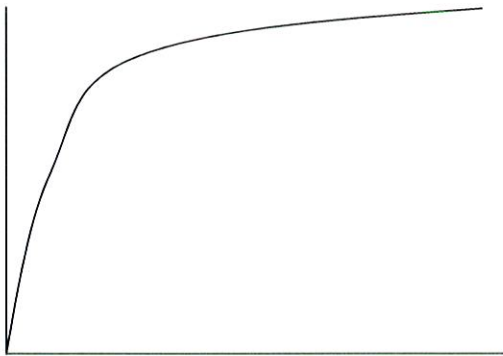
2.



3.



4.



PART 3.

Make up your own story!

- Create the story from scratch.
- Determine the labels to put on the axes.
- Draw the graph.
- Discuss how the graph's features connect to your story.